2. (Once Amended) A kit according to claim 1, wherein the means for determining genetic polymorphism pattern comprises at least one polymerase chain reaction (PCR) primer wherein the PCR primer is selected from:

5'GTA CCT TCC GAG TAT ACA TT 3' (SEQ ID NO: 2); 5'TGTTCTACCACCTGAACTAGGC 3' (SEQ ID NO: 7); 5'AAGCTTGTTCTACCACCTGAACTAGGC 3' (SEQ ID NO: 9); and 5'TTACATATGAGCCTTCCATG 3' (SEQ ID NO: 10).

- 3. (Once Amended) A kit according to claim 1 or 2, wherein the means for determining the genetic polymorphism pattern includes a restriction enzyme selected from the group consisting of: *NcoI*, *AvaI*, and *Bsu35I*.
- 4. (Once Amended) A method of predicting increased risk of sight-threatening diabetic retinopathy, comprising identifying in isolated genomic DNA from a sample previously taken from a diabetic patient a genetic polymorphism pattern comprising a polymorphism selected from the group consisting of: IL-1RN (VNTR) allele 1, IL-1 A (-511) allele 2, and IL-1B (-889) allele 2, wherein the presence of the genetic polymorphism pattern is predictive of an increased risk of sight-threatening diabetic retinopathy.
- 7. (Once Amended) A method according to claim 4 or 5, wherein the DNA genetic polymorphism pattern associated with increased risk of sight-threatening diabetic retinopathy comprises the presence at the combined loci of IL-1A plus IL-1B of at least three copies of the rarer allele for each loci (allele 2) between the two loci.
- 8. (Once Amended) A method according to claim 4 or 5, wherein the DNA genetic polymorphism pattern predicting increased risk of diabetic retinopathy does not include the IL-1RN 2,2 pattern associated with decreased risk of proliferative diabetic retinopathy.
- 10. (New) A method according to claim 6, wherein the DNA genetic polymorphism pattern associated with increased risk of sight-threatening diabetic retinopathy comprises the presence at the combined loci of IL-1A plus IL-1B of at least three copies of the rarer allele for each loci (allele 2) between the two loci.
- 11. (New) A method according to claim 6, wherein the DNA genetic polymorphism pattern predicting increased risk of diabetic retinopathy does not include the IL-1RN 2,2 pattern associated with decreased risk of proliferative diabetic retinopathy.
- 12. (New) A method according to claim 7, wherein the DNA genetic polymorphism pattern predicting increased risk of diabetic retinopathy does not include the IL-1RN 2,2 pattern associated with decreased risk of proliferative diabetic retinopathy.